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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,613	03/23/2001	Hajime Hosaka	112857-223	7172

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EXAMINER

NGUYEN, ANTHONY H

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 10/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/816,613

Applicant(s)

HOSAKA ET AL.

Examiner

Anthony H Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the third component face which includes a shift key, a control key, a cap lock key, alphanumeric characters, kana and kanji characters (claim 8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### *Claim Objections*

Claims 1-21 are objected to because claim 1 appears to be incomplete since a claim must be ended with only a period (.) (MPEP 608.01 (m)), and the language “may” (claims 1 and 14, line 5), “can be” (claim 6 line 4 and claim 18) is not a positive claim language.

### *Claim Rejections - 35 USC § 102*

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Deeds (US 6,202,257).

Deeds teaches a portable information terminal which meets the structure as broadly claimed. Deeds teaches a hand-held device 100 having a plurality of component faces which

includes a component face 108a or 108b having a plurality of input keys 104 and an adjacent component face 116 which includes a display screen 102 (Deeds, Fig.1A).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 6-14, and 18-21 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Deeds (US 6,202,257) in view of Miwa (US 5,626,428).

Deeds teaches a portable information terminal having substantially the structure as claimed. See the explanation of Deeds above. Deeds fails to teach the input keys arranged in a zigzag pattern on the component surface. However, Miwa teaches a keyboard device having a plurality of input keys 7 arranged in a zigzag pattern on a surface 2 as shown in Figs.2,3,6,7 and 9 of Miwa. Therefore, it would have been obvious to one of ordinary skill in the art to modify the hand held device of Deeds by replacing the input keys of Deeds with the input keys arranged in a zigzag pattern as taught by Miwa to improve the efficiency of entering data with one hand. With respect to claim 8, the selection of a desire key to be assigned a function such as a shift key, a control key, a cap lock key or a character on the component face would involve simply the obvious matter of design choice based upon obvious experimentation. With respect to claims 11

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nd 20, the use of keys which are pivoted around a fulcrum at an edge portion is well known in the art.

Claims 3-5 and 15-17 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Deeds (US 6,202,257) in view of Miwa (US 5,626,428) and Kline (US 4,565,460).

Deeds teaches a portable information terminal having substantially the structure as claimed. See the explanation of Deeds above. Deeds fails to teach the input keys arranged in a zigzag pattern on the component surface and having a projection form on the top face of the key. However, Miwa teaches a keyboard device having a plurality of input keys 7 arranged in a zigzag pattern on a surface 2 as shown in Figs.2,3,6,7 and 9 of Miwa. Kline teaches a key 10 having a projection 22 on the surface 12 of the key as shown in Figs.4a-6c. Therefore, in view of the teaching of Miwa and Kline, it would have been obvious to one of ordinary skill in the art to modify the hand held device of Deeds by replacing the input keys of Deeds with the input keys arranged in a zigzag pattern as taught by Miwa and providing a projection on the surface of the key as taught by Kline to improve the efficiency of entering data with one hand. With respect to claims 3 and 15, note the Figs.6a-6c of Kline show a rib-like portion 24 and a projection 12 formed at a middle portion of the key.

### *Conclusion*

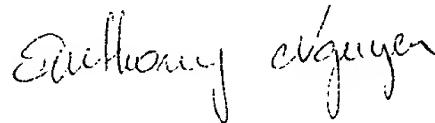
The patents to Snell, Matthews, Heinz, and Shedore are cited to show other structures having obvious similarities to the claimed structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (703) 308-2869. The examiner can normally be reached daily from 9 AM to 5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (703) 305-6619. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

A handwritten signature in cursive script, appearing to read "Anthony Nguyen".

Anthony Nguyen

10/8/02

Patent Examiner

Technology Center 2800